Journal of Non-Newtonian Fluid Mechanics, 48 (1993) 371–372
Elsevier Science Publishers B.V., Amsterdam

Contents of Vol. 48

Vol. 48, Nos. 1+2

Film casting of a modified Giesekus fluid: a steady-state analysis
V.R. Iyengar and A. Co (Orono, ME, USA) 1

Flow in the misaligned cone-and-plane rheometer
D.J. Dudgeon and L.E. Wedgewood (Seattle, WA, USA)..... 21

Determination of the elongational behavior of polypropylene melts from transient shear experiments using Wagner's model
R. Fulchiron, V. Verney (Vernaison, France) and G. Marin (Pau, France)..... 49

Finite element analysis of steady viscoelastic flow around a sphere in a tube: calculations with constant viscosity models
W.J. Lunsmann, L. Genieser, R.C. Armstrong and R.A. Brown (Cambridge, MA, USA)... 63

Polymer melt flow in very thin slits
H. Shidara (Tokyo, Japan) and M.M. Denn (Berkeley, CA, USA)..... 101

Numerical simulation of converging flow of polymer melts through a tapered slit die
T. Kajiwara, S. Ninomiya, Y. Kuwano and K. Funatsu (Fukuoka, Japan)..... 111

Some properties of the upper convected Maxwell model for viscoelastic fluid flow
F. Olsson and J. Yström (Stockholm, Sweden)..... 125

Numerical analysis of start-up planar and axisymmetric contraction flows using multi-mode differential constitutive models
F.P.T. Baaijens (Eindhoven, The Netherlands) 147

Supercritical bifurcations in simple shear flow of a non-aligning nematic: reactive parameter and director anchoring effects
W.H. Han and A.D. Rey (Montreal, Quebec, Canada)..... 181

Corrigenda 211

Calendar 213

Vol. 48, No. 3

Effect of polymer additives on ordered three-dimensional structures arising in cross-slot flow
V.N. Kalashnikov and M.G. Tsiklauri (Moscow, Russian Federation) 215

Independent confirmation that delayed die swell is a hyperbolic transition
D.D. Joseph and C. Christodoulou (Minneapolis, MN, USA) 225

Sink flows of a suspension of rigid rods. Part 2. Lubrication theory
J.M. Rallison and R.A. Keiller (Cambridge, UK) 237

Effect of solvent on polymer degradation in turbulent flow
T. Moussa, C. Tiu and T. Sridhar (Clayton, Vic., Australia)..... 261

Elastic instability in crossflow of polymer solutions through periodic arrays of cylinders
C. Chmielewski and K. Jayaraman (East Lansing, MI, USA) 285

Viscometric functions for FENE and generalized Lennard-Jones dumbbell liquids in Couette flow: molecular dynamics study
B.Z. Dlugogorski, M. Grmela and P.J. Carreau (Montreal, Quebec, Canada) 303

Laminar and turbulent flow of dilute polymer solutions in smooth and rough pipes
K. Wójs (Wrocław, Poland) 337

On the development of secondary motion induced by the free surface in the rod climbing flow
B. Debbaut (Louvain-la-Neuve, Belgium) 357

Announcement 365

Calendar 367

Subject Index 369

Author Index 370

Contents of Vol. 48 371